

SEQUENCE LISTING

<110> Judd, Ralph C.
Manning, Scott D.

<120> Omp85 Proteins of *Neisseria gonorrhoeae* and *Neisseria meningitidis*, Compositions Containing Same and Methods of Use Thereof

<130> UMSBC147AUSA

<150> US 09/177,039
<151> 1998-10-22

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<170> PatentIn version 3.1

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Pro Leu Ala Phe Ala Asp Phe Thr Ile Gln Asp Ile Arg Val Glu Gly
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96

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 Leu Gln Arg Thr Glu Pro Ser Thr Val Phe Asn Tyr Leu Pro Val Lys
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144

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Val Gly Asp Thr Tyr Asn Asp Thr His Gly Ser Ala Ile Ile Lys Ser
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192

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240

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85          90          95

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288

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ctc aac cag gca gtc gcc ggc ctg aaa gaa gaa tat ctc ggg cgc ggc Leu Asn Gln Ala Val Ala Gly Leu Lys Glu Glu Tyr Leu Gly Arg Gly 130 135 140	432
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35 40 45

Val Gly Asp Thr Tyr Asn Asp Thr His Gly Ser Ala Ile Ile Lys Ser
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Leu Tyr Ala Thr Gly Phe Phe Asp Asp Val Arg Val Glu Thr Ala Asp
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Asn Ile Thr Gly Ala Lys Met Leu Gln Asn Asp Ala Ile Lys Lys Asn
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Leu Glu Ser Phe Gly Leu Ala Gln Ser Gln Tyr Phe Asn Gln Ala Thr
115 120 125

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Lys Leu Asn Ile Gln Ile Thr Pro Lys Val Thr Lys Leu Ala Arg Asn
145 150 155 160

Arg Val Asp Ile Asp Ile Thr Ile Asp Glu Gly Lys Ser Ala Lys Ile
165 170 175

Thr Asp Ile Glu Phe Glu Gly Asn Gln Val Tyr Ser Asp Arg Lys Leu
180 185 190

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Arg Ser Asp Arg Phe Asp Arg Gln Lys Phe Ala Gln Asp Met Glu Lys
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Val Thr Asp Phe Tyr Gln Asn Asn Gly Tyr Phe Asp Phe Arg Ile Leu
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Asp Thr Asp Ile Gln Thr Asn Glu Asp Lys Thr Arg Gln Thr Ile Lys
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260 265 270

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Glu Ile Ser Val Gln Pro Leu Pro Asn Ala Gly Thr Lys Thr Val Asp
325 330 335

Phe Val Leu His Ile Glu Pro Gly Arg Lys Ile Tyr Val Asn Glu Ile
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His Ile Thr Gly Asn Asn Lys Thr Arg Asp Glu Val Val Arg Arg Glu
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Asp Ala Val Pro Leu Ala Gly Thr Pro Asp Lys Val Asp Leu Asn Met
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Phe Gly Leu Ala Ala Glu His Leu Thr Val Asn Thr Tyr Asn Lys Ala
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595 600 605

Tyr Ser Ala Thr His Asn Gln Thr Trp Phe Phe Pro Leu Ser Lys Thr
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Phe Thr Leu Met Leu Gly Gly Glu Val Gly Ile Ala Gly Gly Tyr Gly
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675 680 685

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740 745 750

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 100 105 110

Leu Glu Ser Phe Gly Leu Ala Gln Ser Gln Tyr Phe Asn Gln Ala Thr
 115 120 125

Leu Asn Gln Ala Val Ala Gly Leu Lys Glu Glu Tyr Leu Gly Arg Gly
 130 135 140

Lys Leu Asn Ile Gln Ile Thr Pro Lys Val Thr Lys Leu Ala Arg Asn
 145 150 155 160

Arg Val Asp Ile Asp Ile Thr Ile Asp Glu Gly Lys Ser Ala Lys Ile
 165 170 175

Thr Asp Ile Glu Phe Glu Gly Asn Gln Val Tyr Ser Asp Arg Lys Leu
 180 185 190

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Arg Ser Asn Gln Phe Asn Glu Gln Lys Phe Ala Gln Asp Met Glu Lys
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Val Thr Asp Phe Tyr Gln Asn Asn Gly Tyr Phe Asp Phe Arg Ile Leu
 225 230 235 240

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Ile Thr Val His Glu Gly Arg Phe Arg Trp Gly Lys Val Ser Ile
 260 265 270

Glu Gly Asp Thr Asn Glu Val Pro Lys Ala Glu Leu Glu Lys Leu Leu
 275 280 285

Thr Met Lys Pro Gly Lys Trp Tyr Glu Arg Gln Gln Met Thr Ala Val
290 295 300

Leu Gly Glu Ile Gln Asn Arg Met Gly Ser Ala Gly Tyr Ala Tyr Ser
305 310 315 320

Glu Ile Ser Val Gln Pro Leu Pro Asn Ala Glu Thr Lys Thr Val Asp
325 330 335

Phe Val Leu His Ile Glu Pro Gly Arg Lys Ile Tyr Val Asn Glu Ile
340 345 350

His Ile Thr Gly Asn Asn Lys Thr Arg Asp Glu Val Val Arg Arg Glu
355 360 365

Leu Arg Gln Met Glu Ser Ala Pro Tyr Asp Thr Ser Lys Leu Gln Arg
370 375 380

Ser Lys Glu Arg Val Glu Leu Leu Gly Tyr Phe Asp Asn Val Gln Phe
385 390 395 400

Asp Ala Val Pro Leu Ala Gly Thr Pro Asp Lys Val Asp Leu Asn Met
405 410 415

Ser Leu Thr Glu Arg Ser Thr Gly Ser Leu Asp Leu Ser Ala Gly Trp
420 425 430

Val Gln Asp Thr Gly Leu Val Met Ser Ala Gly Val Ser Gln Asp Asn
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Leu Phe Gly Thr Gly Lys Ser Ala Ala Leu Arg Ala Ser Arg Ser Lys
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Thr Thr Leu Asn Gly Ser Leu Ser Phe Thr Asp Pro Tyr Phe Thr Ala
465 470 475 480

Asp Gly Val Ser Leu Gly Tyr Asp Val Tyr Gly Lys Ala Phe Asp Pro
485 490 495

Arg Lys Ala Ser Thr Ser Ile Lys Gln Tyr Lys Thr Thr Thr Ala Gly
500 505 510

Ala Gly Ile Arg Met Ser Val Pro Val Thr Glu Tyr Asp Arg Val Asn
515 520 525

Phe Gly Leu Val Ala Glu His Leu Thr Val Asn Thr Tyr Asn Lys Ala
530 535 540

Pro Lys His Tyr Ala Asp Phe Ile Lys Lys Tyr Gly Lys Thr Asp Gly
545 550 555 560

Thr Asp Gly Ser Phe Lys Gly Trp Leu Tyr Lys Gly Thr Val Gly Trp
565 570 575

Gly Arg Asn Lys Thr Asp Ser Ala Leu Trp Pro Thr Arg Gly Tyr Leu
580 585 590

Thr Gly Val Asn Ala Glu Ile Ala Leu Pro Gly Ser Lys Leu Gln Tyr
595 600 605

Tyr Ser Ala Thr His Asn Gln Thr Trp Phe Phe Pro Leu Ser Lys Thr
610 615 620

Phe Thr Leu Met Leu Gly Gly Glu Val Gly Ile Ala Gly Gly Tyr Gly
625 630 635 640

Arg Thr Lys Glu Ile Pro Phe Phe Glu Asn Phe Tyr Gly Gly Leu
645 650 655

Gly Ser Val Arg Gly Tyr Glu Ser Gly Thr Leu Gly Pro Lys Val Tyr
660 665 670

Asp Glu Tyr Gly Glu Lys Ile Ser Tyr Gly Gly Asn Lys Lys Ala Asn
675 680 685

Val Ser Ala Glu Leu Leu Phe Pro Met Pro Gly Ala Lys Asp Ala Arg
690 695 700

Thr Val Arg Leu Ser Leu Phe Ala Asp Ala Gly Ser Val Trp Asp Gly
 705 710 715 720

Lys Thr Tyr Asp Asp Asn Ser Ser Ala Thr Gly Gly Arg Val Gln
 725 730 735

Asn Ile Tyr Gly Ala Gly Asn Thr His Lys Ser Thr Phe Thr Asn Glu
 740 745 750

Leu Arg Tyr Ser Ala Gly Gly Ala Val Thr Trp Leu Ser Pro Leu Gly
 755 760 765

Pro Met Lys Phe Arg Tyr Ala Tyr Pro Leu Lys Lys Lys Pro Glu Asp
 770 775 780

Glu Ile Gln Arg Phe Gln Phe Gln Leu Gly Thr Thr Phe
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18

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<213> *Neisseria gonorrhoeae*

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<212> DNA

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67